Complete Summary

GUIDELINE TITLE

Diagnosis and management of headache.

BIBLIOGRAPHIC SOURCE(S)

Singapore Ministry of Health. Diagnosis and management of headache. Singapore: Singapore Ministry of Health; 2000 Nov. 25 p. [15 references]

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Headache

GUIDELINE CATEGORY

Diagnosis
Management
Treatment

CLINICAL SPECIALTY

Family Practice
Internal Medicine
Neurology

INTENDED USERS

Physicians

GUIDELINE OBJECTIVE(S)

To assist doctors in making appropriate choices in the work up and treatment of patients presenting with a headache

TARGET POPULATION

Patients with headaches

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis

1. Classification of headache (primary, secondary, type of headache)
2. Computed tomography
3. Magnetic resonance imaging
4. Lumbar puncture and cerebral spinal fluid examination
5. Specialist referral of patients with suspected secondary headaches

*Note: Electroencephalogram and skull x-ray are considered but not recommended

Pharmacotherapy

1. Beta-blockers (atenolol, timolol, and propranolol)
2. Calcium channel blockers (flunarizine and verapamil)
3. Serotonin receptor antagonists (pizotifen)
4. Anticonvulsants (sodium valproate)
5. Nonsteroidal anti-inflammatory drugs (NSAIDs) (naproxen sodium, ibuprofen, mefenamic acid, ketoprofen, ketorolac)
6. Simple analgesics (acetylsalicylic acid, paracetamol, paracetamol/codeine, paracetamol/caffeine)
7. Nonselective serotonin agonists (ergotamine)
8. Selective serotonin agonists (naratriptan, sumatriptan, zolmitriptan)
9. Antidepressants (amitriptyline, clomipramine, mianserin, moclobemide)
10. Anxiolytics (buspirone, alprazolam)
11. Serotonin reuptake inhibitors (fluoxetine, fluvoxamine, paroxetine)
12. Anti-emetics (metoclopramide, prochlorperazine)

Nonpharmacological Management

1. Acupuncture
2. Physical therapy
3. Relaxation training
4. Biofeedback
5. Cognitive behavioural therapy
6. Patient education and counseling

MAJOR OUTCOMES CONSIDERED

- Quality of life
- Self-reported symptoms (morbidity), such as headache frequency, duration and intensity, and the effects and side-effects of prescribed medication

- Scores on standardized questionnaires, such as the Migraine Disability Assessment Questionnaire (MIDAS)

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Not stated

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Levels of Evidence

Level Ia: Evidence obtained from meta-analysis of randomised controlled trials.

Level Ib: Evidence obtained from at least one randomised controlled trial.

Level IIa: Evidence obtained from at least one well-designed controlled study without randomisation.

Level IIb: Evidence obtained from at least one other type of well-designed quasi-experimental study.

Level III: Evidence obtained from well-designed non-experimental descriptive studies, such as comparative studies, correlation studies and case studies.

Level IV: Evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities.

METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Grades of Recommendation

Grade A (evidence levels Ia, Ib): Requires at least one randomized controlled trial as part of the body of literature of overall good quality and consistency addressing the specific recommendation.

Grade B (evidence levels IIa, IIb, III): Requires availability of well conducted clinical studies but no randomised clinical trials on the topic of recommendation.

Grade C (evidence level IV): Requires evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities. Indicates absence of directly applicable clinical studies of good quality.

Good Practice Points: Recommended best practice based on the clinical experience of the guideline development group.

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Not stated

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Not stated

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Each recommendation is rated based on the level of the evidence and the grades of recommendation. Definitions of the grades of the recommendations (A, B, C, Good Practice Points) and level of the evidence (Level I - Level IV) are presented at the end of the Major Recommendations field.

C - Doctors should always attempt to make an accurate diagnosis of the type of headache and its cause (International Headache Society, 1998). (Grade C, Level IV)

GPP - All patients with suspected secondary (or symptomatic) headaches should be referred to a specialist. (Good Practice Points)

C - Neuroimaging is required for secondary headaches. (Grade C, Level IV)

B - Neuroimaging is generally not needed for primary headaches. (Grade B, Level III)

B - Electroencephalogram is not a recommended examination in the evaluation of headaches. (Grade B, Level III)

B - Skull x-ray is not a recommended examination in the evaluation of headaches. (Grade B, Level III)

C - Cerebral spinal fluid examination by lumbar puncture should be performed only for specific indications. (Grade C, Level IV)

GPP - Caution should be exercised in performing lumbar punctures, especially when imaging has not been obtained. (Good Practice Points)

C - Pharmacotherapy should be chosen on the basis of properly conducted trials compared with placebo and standard treatment. (Grade C, Level IV) (Note: Annex 2 and Annex 3 of the original guideline document list the available drugs that have reasonable levels of scientific evidence for efficacy in the management of migraine and tension headache, respectively.)

Grades of Recommendation

Grade A (evidence levels Ia, Ib): Requires at least one randomized controlled trial as part of the body of literature of overall good quality and consistency addressing the specific recommendation.

Grade B (evidence levels IIa, IIb, III): Requires availability of well conducted clinical studies but no randomised clinical trials on the topic of recommendation.

Grade C (evidence level IV): Requires evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities. Indicates absence of directly applicable clinical studies of good quality.

Good Practice Points: Recommended best practice based on the clinical experience of the guideline development group.

Levels of Evidence

Level Ia: Evidence obtained from meta-analysis of randomised controlled trials.

Level Ib: Evidence obtained from at least one randomised controlled trial.

Level IIa: Evidence obtained from at least one well-designed controlled study without randomisation.

Level IIb: Evidence obtained from at least one other type of well-designed quasi-experimental study.

Level III: Evidence obtained from well-designed non-experimental descriptive studies, such as comparative studies, correlation studies and case studies.

Level IV: Evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities.

CLINICAL ALGORITHM(S)

The original guideline contains a clinical algorithm for the diagnosis and management of headache.

EVIDENCE SUPPORTING THE RECOMMENDATIONS

REFERENCES SUPPORTING THE RECOMMENDATIONS

References open in a new window

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations").

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Appropriate diagnosis and management of headaches, which do often affect the patient's quality of life and may occasionally signal the presence of a more sinister disorder.

POTENTIAL HARMS

Not stated

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

The guideline is not intended to serve as a standard of medical care. Standards of medical care are determined on the basis of all clinical data available for an individual case and are subject to change as scientific knowledge advances and patterns of care evolve.

The contents of the guideline document are guidelines to clinical practice, based on the best available evidence at the time of development. Adherence to these guidelines may not ensure a successful outcome in every case, nor should they be construed as including all proper methods of care or excluding other acceptable methods of care. Each physician is ultimately responsible for the management of

his/her unique patient in the light of the clinical data presented by the patient and the diagnostic and treatment options available.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

The audit process in headache management has to take into consideration that the vast majority of headaches are benign, have a chronic recurrent course and lack objective measures of abnormality. Indicators of adequacy can, therefore, be categorised into two groups:

1. Indicators of structure
2. Measures of treatment outcome

These must enable every medical practitioner attending to a patient presenting with headache to fulfill the main objectives of management, which are to distinguish secondary headaches from primary headaches and to effectively relieve symptoms.

Indicators of structure

In the management of the patient with headache, every centre must have:

- Availability of or access to neuroimaging facilities
- Access to tertiary neurosurgical, and neurology care
- Access to specialists/professionals who can provide adjunctive care (psychiatrists, physiotherapists, occupational therapists)

Measures of treatment outcome

The subjective nature of headaches implies that useful measures of outcome must necessarily depend on self- reported symptoms.

At each outpatient visit, the doctor must attempt to:

- Record the current headache frequency, duration and intensity
- Record the effects and side-effects of prescribed medication

A standardized score, such as the Migraine Disability Assessment Questionnaire (MIDAS), which is based on the Headache Impact Questionnaire Score, is a validated tool to quantify headache burden and enables a more objective assessment of therapeutic response.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better
Living with Illness

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Singapore Ministry of Health. Diagnosis and management of headache. Singapore: Singapore Ministry of Health; 2000 Nov. 25 p. [15 references]

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2000 Nov

GUIDELINE DEVELOPER(S)

National Committee on Neuroscience (Singapore) - National Government Agency [Non-U.S.]
National Medical Research Council (Singapore Ministry of Health) - National Government Agency [Non-U.S.]
Singapore Ministry of Health - National Government Agency [Non-U.S.]

GUIDELINE DEVELOPER COMMENT

These guidelines on the diagnosis and management of headache were prepared by the Singapore National Committee on Neuroscience through its Subcommittee on Headache.

SOURCE(S) OF FUNDING

Singapore Ministry of Health

GUIDELINE COMMITTEE

National Committee on Neuroscience Subcommittee on Headache

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Committee members: Dr. Selina Chua Poh Kim (Chairperson); Dr. Yu Su Ling; Dr. Abdul Aziz; Dr. Chan Weng Buen; Dr. Ho Hon Kwok; Dr. Ann Tan; Dr. Wong Yee Chee; Dr. Yeo Seow Heong

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

An update is not in progress at this time.

GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the Singapore Ministry of Health Web site.

Print copies: Available from the Singapore Ministry of Health, College of Medicine Building, Mezzanine Floor 16 College Rd, Singapore 169854.

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

None available

NGC STATUS

This summary was completed by ECRI on October 25, 2001. The information was verified by the guideline developer on November 16, 2001.

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